

curred because of the resulting disability. . . . Comparison of various methods of treatment led to the conclusion that the best results were obtained by the injection of procaine hydrochloride into the involved areas. Ten to 20 cc. of a 2 per cent solution were generally injected into the injured ligaments. All tender points and the adjacent areas were anesthetized. Injections were continued until motion disclosed the absence of all pain. Preliminary x-ray studies were made to exclude fractures or injuries other than ligamentous ones. It was quickly discovered that strapping, applications, heat, and brief or prolonged rest were all unnecessary. Instead of immobilization, normal use of the joint hastened recovery." 4 references.

J. C. M. C.

KELLY, MICHAEL: *Pain in the Chest: Observations on the Use of Local Anesthesia in Its Investigation and Treatment*. M. J. Australia 1: 4-7 (Jan. 1) 1944.

"In the majority of cases of pain in the chest, no signs of visceral disease are found, and the physician will make a diagnosis of pleurodynia, or intercostal neuralgia. The pain is made worse by breathing or coughing, and sometimes by movements of the arm or the trunk. The pain as a rule is unilateral, and may shoot from the back around to the front; in every case it is diffuse and difficult to locate, seeming to spread over an area variable in extent. Often the patient will complain that the chest is tender, and examination by palpation will confirm this. In other cases tenderness of the chest wall is not easily demonstrable, though the pain may be severe. . . . According to the orthodox authorities, pleurodynia is an intramuscular fibrositis. . . . It is generally accepted now that the essence of fibrositis is a circumscribed lesion situated in muscular tissue,

which can be recognized as a strictly localized point of tenderness. Such a minute lesion often will be responsible for a poorly localized pain referred to a wide area. In addition, secondary tenderness of the deep structures may be demonstrable over a greater or lesser area surrounding the lesion. That this tenderness is secondary to the main lesion is proved by the fact that the injection of local anaesthesia into the lesion abolishes, not only the spontaneous pain, but the referred tenderness as well. . . . Because of the ease with which movements of the ribs can be reduced to a minimum with adhesive plaster, pleurodynia is particularly amenable to relief by strapping. In many cases the pain disappears in a day or two with or without treatment. If the pain shows no signs of abating after a few days, the lesion should be infiltrated with a few cubic centimetres of a local anaesthetic agent. Because of the presence of referred tenderness, the error of injecting the wrong spot will sometimes be made; but the practitioner should persevere until the true lesion is discovered and treated. The signs of successful treatment are unmistakable; all pain on movement or on coughing suddenly vanishes, and the referred tenderness is observed to disappear. In the majority of cases the relief is permanent, but in some a second injection is found to be necessary after four to seven days. . . . When pain in the chest is associated with physical signs of disease of the lungs or pleura, the pain can often be relieved in the same fashion." 9 references.

J. C. M. C.

STEWART, R. A.: *The Use of Naphthocaine as a Local Anesthetic in Ophthalmology*. Am. J. Ophth. 27: 178-179 (Feb.) 1944.

"Naphthocaine is the mono-hydrochloride of beta-diethylaminoethyl